

DOCUMENT RESUME

ED 420 399

PS 026 560

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 TITLE Environmentally Induced Damage to Children: A Call for Broadening the Critical Agenda.
 PUB DATE 1998-04-00
 NOTE 21p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Diego, CA, April 13-17, 1998).
 PUB TYPE Opinion Papers (120) -- Speeches/Meeting Papers (150)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Academic Achievement; Allergy; Asthma; *Disease Incidence; *Economically Disadvantaged; *Educational Change; *Educationally Disadvantaged; Elementary Education; Elementary School Students; *Environmental Influences; Lead Poisoning; Physical Environment; Pollution; Public Health; Social Attitudes

ABSTRACT

The incidence of environmentally related illnesses, such as tuberculosis, asthma, allergies, respiratory disease, depression, and violent anger is increasing, particularly in the inner cities. The effects of these illnesses is often overlooked in discussions of educational and social inequity. This article discusses the significance of this increase in disease with regard to the welfare of children and the impact on their academic achievement, due to physical and mental impairments. Information is provided about the causes, consequences, and rates of incidence of tuberculosis, lead poisoning and asthma. The article comments on the ways in which society and the schools have responded to these illnesses, and then considers the context of discussion about these illnesses and the social response to them. The article notes that, often, these illnesses are considered an affliction of the poor. The article issues a challenge for school reform that addresses environmentally induced damage to children as an educational issue, as well as a social one. Contains 44 references. (JPB)

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ENCOUNTER: EDUCATION FOR MEANING AND SOCIAL JUSTICE

ENVIRONMENTALLY INDUCED DAMAGE TO CHILDREN:
A CALL FOR BROADENING THE CRITICAL AGENDA

After running a lap at school [8-year-old] Chelsea started to wheeze. She asked the teacher if she could go inside and take her medicine. The teacher told her to wait until class was over. Chelsea's upper lip was turning blue and she was weak-kneed when a young schoolmate walked her to the office. After that, her allergist told the well-behaved Chelsea to disobey adults - or she might die following their misguided advice about asthma.... "Every class she's been in says they have the highest number of asthma kids they ever had," Chelsea's mother said. "It makes me wonder. What is going on?"

-- *Los Angeles Times*, October 27, 1996

INTRODUCTION

Although researchers and policy makers now have a fairly sophisticated understanding of environmental threats to children's health, millions of young people in the United States suffer from preventable diseases and health problems. Cases of tuberculosis, a contagious but preventable disease often bred in cramped living quarters, rose sharply between 1985 and 1992 after several decades of decline (Centers for Disease Control and Prevention, August 1996, 5). Although often ill equipped to respond adequately, school nurses are seeing more and more children with asthma, allergies, and respiratory disease as well as depression and violent anger (Children's Defense Fund, March 1997, 7).

"We've noticed patterns of types of disabilities - waves of children from certain locations," such as those near apple orchards and cornfields routinely sprayed with

pesticides, said Gail Cohen, coordinator of early intervention services at Brookside School, site of a program for children with disabilities in upstate New York. "What we're seeing now are preemies, babies born very small - one pound" (Cohen, pers. com. 1997). "[M]any children in poor neighborhoods such as Mott Haven [in the South Bronx] have been neurologically impaired, some because of low-weight prematurity at birth, some because of drug ingestion while in utero, and many from lead poison in their homes and also, shockingly enough, within their schools" (Kozol 1995, 155). As a society, we now know enough about lead poisoning to eradicate it; nevertheless, "in some inner-city communities, one out of two children risks permanent mental impairment due to excessive lead exposure" (Wilson 1996, 236).

Like Chelsea's mother, I wonder what is going on. Why has environmentally induced disease and damage to children *not* become more of a public issue? Why the lack of a collective outcry against this social injustice? And why the relative lack of attention from educational scholars and researchers? Clearly, if children are reared in poisonous environments where infections are spread easily, they are not going to learn well. And pointing to a few cases in which, miraculously, some children do is not an adequate response to the reality that most children denied even minimally adequate learning conditions do not flourish.

Sadly, acknowledgment of the environmental requisites for children's growth and development has been conspicuously absent in the most recent wave of educational reform. Although Clinton's Goals 200 legislation affirms that "All children will start school ready to learn," little has been said about the social, emotional, and environmental conditions under which children can learn best. The silence underscores the need for educators and educational scholars to speak up about the tragedy that lies at the heart of the educational crisis of our times - namely, that "[t]he children of the socially marginal are being denied even minimal learning conditions" (Comer 1997, 170-171).

Jonathan Kozol (1995) makes this pointed observation about scholars' seeming lack of concern with issues of environmental damage to children:

Many of the liberal intellectuals I know who are concerned with questions of unequal access to secondary schools tend to focus more on inequalities that may be caused by our selection systems than on those that are engendered by environmental forces that are neurological in nature. In human terms, it's understandable It is less painful to speak of an unfair test than of brain

damage since a test can someday be revised and given to a child again, but childhood cannot (156-157).

It is less painful to speak of biased testing than of brain damage but not only, I believe, because the damage is less consequential. It is less painful also because the cost of responding significantly to the problem is much less, because the delineation of responsibility both for causing and for correcting the problem is cleaner, and because the horror is less shameful.

In response to Kozol's challenge, I have reviewed some of the recent medical research on tuberculosis, lead poisoning, and asthma — all diseases or conditions engendered or exacerbated by environmental forces. I also have reviewed news reports that suggest how schools and the broader society generally are responding to the alarming increase in asthma, especially among children, to the widespread damage suffered by children exposed to lead, and to what the president of the American Lung Association has called the "time bomb" of tuberculosis (Dr. Alfred Munzer, quoted in Pinkney 1994, 12).

Although environmentally induced damage could be framed in any number of ways, in the medical and popular literature of today it largely is framed (accurately, I believe) as "an affliction of the poor" (Nossiter 1995, B2). At the same time, however, environmentally induced damage often is construed as an issue of misfortune — the bad luck inherent in statistical probability or of being born to parents unable or unwilling to offer protection -- and as something the unfortunate must cope with, individually, through treatment and education. Cast in this way, environmentally induced damage appears not as a predictable consequence of social policies and inaction — that is, not as an issue of social injustice -- but rather as an unpredictable consequence of, for example, poor parental decision making about where to live.

Poor children of color who disproportionately are being assigned to the very worst public schools (Kozol 1991), are growing up to face the highest rates of unemployment (Rifkin 1995, 77-78), and are spending portions of their young adult years in the nation's jails and prisons (Males 1996, 248) also are bearing the brunt of environmentally induced damage. On top of this, much of the public and professional discourse represents these children as unfortunate "others" — a perspective that invites social inaction and, consequently, more damage. A review of reports in national newspapers suggests that what doctors in the Bronx note about the asthma "epidemic" pertains to environmentally induced damage in general: "The epidemic is a singularly

quiet one. It has not spawned headlines, demonstrations, advocacy groups or loud calls for public action. One explanation: it is an affliction of the poor, those who have less voice" (Nossiter 1995, B2).

Recognizing the moral horror of environmentally induced damage to children obviously will not reverse the damage. But failure to understand, and speak up about, the gravity of the situation in its social depth and moral urgency insures that responses will continue to be short-sighted and dangerously marred by the prevailing propensity to teach children to cope as best they can, point fingers at their socially devalued parents, and look on a social level for the cheapest way out.

In the discussion that follows I provide information about the causes, consequences, and rates of incidence of tuberculosis, lead poisoning, and asthma; comment on how the society and its schools have responded; and then speak to issues of framing – that is, to how the issue of environmentally induced disease is being interpreted and discussed. Finally, I come back to Kozol's challenge and argue that environmentally induced damage ought to be seen as a social issue and therefore also as an educational issue.

TUBERCULOSIS

The rate of tuberculosis [TB] cases dropped steadily from 1975 (the first year for which data comparable to that collected today is available) until 1985. However, between 1985 and 1992, TB cases rose more than 20% among all age groups and more than 35% among children up to 14 years old (Centers for Disease Control statistics; cited in Pinkney 1994, 11). Among children under 5 living in large cities (with populations greater than 250,000), reported cases of TB rose 94.3% between 1987 and 1991 (Sass 1996, 2087).

TB rates began to drop in 1993. However, an outbreak occurred that year at LaQuinta High School in a suburb outside Los Angeles. More than 300 students, close to 25% of the student body, tested positive for TB. One of the students had had the disease, undiagnosed by her doctors, for 13 months. According to a Centers for Disease Control and Prevention [CDC] report, the school ventilation system had not been working properly ("California School" 1994, A1). In 1996, the number of TB cases rose in 20 states and "sporadic outbreaks" of drug-resistant strains continued to occur across the nation (Goldstein & Suplee 1997, p. A3).

"I've worked in Africa where TB is endemic, and what we're seeing here isn't any different from what we're seeing in other parts of the world," said Dr. Barbara Watson of Children's Hospital of Philadelphia (quoted in Pinkney 1994, 11-12).

Children develop TB faster and more intensely than adults. They "can become very, very sick very, very fast," said Dr. Jeffrey Starke, director of the TB clinic at Baylor College of Medicine (quoted in Pinkney 1994, 12). Unlike adults with TB, only some of whom are newly infected, every case in a child is a newly acquired infection. "[I]t is an epidemiologic emergency from that point of view," said Dr. Laura Gutman of Duke University Medical Center (quoted in Pinkney 1994, 12).

Yet, this need not be. "With adequate resources and decision-making, we could come close to eliminating pediatric tuberculosis in just a few years," said Dr. Starke (quoted in Pinkney 1994, p. 12). In fact, the opposite has occurred: A survey of 26 large-city health departments found 11 slashed their TB-control budgets between 1988 and 1992, three of them by more than 25% (Pinkney 1994, 12).

Identifiable groups of children are bearing the brunt of these cuts:

The current outbreak of TB – which most observers link to federal funding cuts for public health programs in the 1980s – has been concentrated among poor children, the homeless, youngsters with AIDS or other serious health problems, and children who have immigrated to the United States from countries where tuberculosis is widespread. The vast majority of children who have contracted the disease are members of racial and ethnic minorities living in inner cities (Ruben 1994, 23).

In this country, non-white children up to 5 years old (African-Americans, Asian/Pacific Islanders, Hispanics, and American Indian/Alaskan Natives) are 10½ to 12 times more likely to have TB than their white counterparts. For young people 5 to 14 years old, the racial/ethnic discrepancies are even larger: Non-white 5- to 14-year-olds are 19 to 32 times more likely to have TB than their white counterparts, CDC data show (August 1996, 6).

"Unless we reinvent our badly deteriorated public health system," warns Dr. Richard Jacobs, a national authority on TB, "this thing is going to get nothing but worse" (quoted in Ruben 1994, 23).

LEAD POISONING

Largely as a result of federal efforts to reduce exposure to lead, blood-lead levels in the United States have decreased dramatically in the last few decades (Goldman &

Carra 1994, 315). Nevertheless, in 1991, lead poisoning remained "the No. 1 environmental threat to the health of children in the United States," according to the Secretary of Health and Human Services at the time (L. Sullivan; quoted in Lively 1994, 316). Increased understanding of lead poisoning and its damage led the CDC to lower the acceptable blood-lead level three times in recent years. Based on the current definition of 10 micrograms per deciliter, about 4 million children in the United States -- almost 9% -- now have harmful levels of lead in their bloodstreams (Rosen 1995, 16). Although lead paint was banned more than 20 years ago with the passage of the Lead Paint Poisoning Prevention Act, about two-thirds of all homes with young children still have lead paint or dust hazards (U.S. Department of Housing and Urban Development estimates; cited in Goldman & Carra 1994, 315).

As with TB, poor children of color, especially young children in inner cities, have been disproportionately harmed by this "entirely preventable" condition (Goldman & Carra 1994, 315). A 1994 study (Brody et al. 1994; cited in Rosen 1995, 16) showed 36.7% of all African-American children in the United States were suffering from lead poisoning, compared with 17% of Latino children and 6.1% of white children (16). The poorer the family, the greater the likelihood the child would be affected. When Rosen (1995) looked at the relationship between family income and lead-poisoning among urban white children 6 months to 5 years old, he found 32.4% of the children in families with annual incomes of at least \$15,000 had lead poisoning, compared with 50% in families with incomes of \$6,000 to \$14,999 and 68.2% in families with incomes of less than \$6,000 (12).

Also, the younger the child, the greater the risk. A national study carried out between 1988 and 1991 found 4.5% of the U.S. population had blood-lead levels in the toxic range. However, 11.5% of children 1 to 2 years old had blood-lead levels in this range. The highest rates were among poor children of color, many of whom live in older, poor quality homes where they are exposed to the single most concentrated source of lead: paint and dust. Lack of access to routine medical care compounds the problem (Brody et al. 1994; cited in Goldman & Carra 1994, 315).

Numerous studies have documented the damage done to children exposed to lead. "Lead poisoning in children can cause serious, sometimes irreversible, damage, including cognitive and hearing impairment, convulsions, coma, and even death" (Children's Defense Fund 1997, 30). "Studies dating back to 1929 have established especially pernicious consequences of high lead exposure to children including

retarded physical growth and development, brain damage and learning disabilities, hyperactivity, and impaired hearing" (Lively 1994, 314). Studies since 1943 have linked lead exposure with impaired psychometric intelligence. Even at low levels, lead exposure has been shown to impair children's IQ (Needleman & Gatsonis 1990, 673).

Elevated lead levels have been linked with reading difficulties, general school failure, and recently with attention problems, aggression, and delinquent behavior (Needleman et al. 1996). A 1996 study of 300 boys, tested for lead toxicity in first grade, then retested at age 11, found the boys with relatively high bone-lead levels had more attention problems, were more aggressive, and suffered more anxiety and depression than their counterparts – this according to the judgments of parents, teachers, and the boys themselves. "If the findings ... are found to extend to the population of U.S. children, the contribution of lead to delinquent behavior would be substantial," the study's authors concluded. "[A]ltered social behavior may be among the earliest expressions of lead toxicity" (Needleman et al. 1996, 369).

ASTHMA

Asthma, a chronic, inflammatory disease that results in narrowed airways in the lungs, now afflicts about 14 million to 15 million people in the United States, including almost 5 million children and young people under 18 (CDC 1996a, 350). Symptoms range from mild shortness of breath to severe airway obstruction that can result in wheezing or, in thousands of cases a year, death (Leary 1997, A18). With the right medication, however, even severe asthmatic attacks can be managed (Cowley & Underwood 1997, 61).

According to the *Los Angeles Times*,

Knowledge about how to treat asthma has vastly improved in the last 15 years. There are daily medications to calm the inflamed airways to prevent attacks. Pocket-sized inhalers for emergencies that can be tucked into a child's jeans. Lifesaving breathing machines that are carried in a shoulder pack. Support groups for parents. Asthma camps for kids. Curricula for schools (Cone 1996, A28).

Nevertheless, "At the same time that our treatment regimens and strategies of care have expanded with proven efficacy, the prevalence, morbidity and mortality are all increasing," said UCLA pediatrician Neal Halfon (quoted in Cone 1996, A28).

Between 1982 and 1994 the asthma rate increased more than 61%. Among children under 18, the increase was more than 72% (American Lung Association

1996, 4). "Asthma is unquestionably, and unaccountably, on the rise, and some parts of the U.S. population – notably children, and women – have felt the effect more dramatically than others" (American Lung Association, 1996, 3). Asthma death and hospitalization rates also have accelerated in recent years, especially among preschoolers and African-Americans. Asthma now kills, on average, 14 people in the United States every day. In the last 20 years the death toll has more than tripled (Cone 1996, A28). For people 24 years old and younger, CDC statistics show, the asthma death toll increased 118% between 1980 and 1993 (May 3, 1996, 350). Asthma "is the No. 1 chronic disease afflicting American children, and it's not unusual for an asthmatic child to miss 20 to 40 days of school each year," the *Los Angeles Times* reported (Cone 1996, A28).

Infections, allergies, and environmental factors, such as dust and tobacco smoke, are known to provoke asthma attacks as well as crowded living conditions where respiratory infections pass easily from one person to another (Nossiter 1995, B2). However, there appears to be no agreement about exactly why asthma attacks, hospitalizations, and deaths have increased so significantly in recent years. Improved diagnoses may have resulted in more reported cases. The fact that a quarter of all children in this country now live in areas that exceed federal standards for ozone, which irritates the lungs, may be important ("Asthma Toll" 1996, A18). Also, many children, especially poor children of color, lack quality health care. "Many African-Americans still receive a large portion of their health care in clinical settings where they don't get exposed to providers who are as knowledgeable about asthma or up-to-date about the latest treatments," said Dr. LeRoy Graham, a pediatric lung specialist with the American Lung Association. "It's tragic because asthma is extremely treatable" (quoted in "Asthma Toll" 1996, A18).

Although asthma has increased in recent years across all races, ethnicities, ages, and geographies, identifiable populations are suffering disproportionately. As is almost always the case, it seems, poor children of color, particularly those in inner cities, are suffering the most. As a group, African-Americans develop asthma more often than others, and suffer attacks that are more severe. Statistics for 1993 from the CDC show that, compared with their white counterparts, African-American children under 4 years old were six times more likely to die of asthma, that African-American children 5 to 14 years old were four times more likely to die of asthma, and that African-American children and young people up to 24 years old were 3.4 times more likely to

be hospitalized (CDC May 3, 1996, 351). Asthma among Latino children has mirrored the rise among white children. However, doctors say Latinos in major cities are starting to suffer the same "rampant severity" as African-Americans (Cone 1996, A28).

"The problem is at its worst in cities, especially in Chicago and New York, where children are hospitalized at nearly twice the national rate for asthma," *The New York Times* reported. "The byproducts of poverty – cockroach feces, dust mites, mold, dampness, drafts, and rat and mouse urine – have all been found to exacerbate asthma. Crowded conditions, where respiratory infections can be passed easily from one person to another, can make asthma worse. So can anxiety" (Belluck 1996, A41). Although the United States has an overall asthma rate of about 5%, the rate in New York City is 8.4%, and as high as 25% among children in the poorest urban neighborhoods, according to Dr. Irwin Redlener of New York's Montefiore Medical Center (quoted in Cowley & Underwood 1996, 61). Doctors in poor neighborhoods (Harlem, East Harlem, the South Bronx) characterize asthma as "an emerging epidemic" (Belluck 1996, A41). "I can't remember ever being in another place in the United States in which so many children spoke of having difficulty breathing," Kozol (1995) commented, reflecting on the time he spent in the South Bronx (170).

[T]he rate of hospitalization admissions for asthma statewide in New York is 1.8 per 1,000 people. In New York City, it is 2.5 per 1,000, but in Mott Haven [the poorest congressional district in the nation] the rate rises to 6.0 in the St. Ann's neighborhood and 6.9 in the adjacent zip code. The lowest rate of pediatric asthma in the Bronx ... is in Riverdale, a predominantly white section; the highest rate, more than five times that of Riverdale, is in Mott Haven, where the rate of child pneumonia is also very high: ten times that of Riverdale. The asthma mortality rate for people in the Bronx, the borough with the highest concentration of black and Hispanic residents, is nearly nine times that of Staten Island, which is the whitest borough in the city.¹

Not surprisingly, asthma has become the most prevalent health problem in many New York City schools, especially elementary schools in poor areas (Belluck 1996, A39). "School officials say asthma is a leading cause of absences, with serious attacks often keeping children home for a week at a time. School nurses have had to call ambulances for some children. And teachers say the fatigue and breathing problems affect children's concentration and achievement in class" (A41). In a 1994

survey of new students in elementary and junior high schools throughout New York City, almost 4% said they had asthma; in poor areas, however, the rate rose to 12% (A41). A fourth-grade teacher at P.S. 30 in the South Bronx told *The New York Times* 12 of his 30 students have asthma and eight bring breathing pumps to class. The principal of another school in the South Bronx, St. Luke, said 40% of her school's pre-kindergarten to eighth-grade students have asthma (Nossiter 1995, B2).

Why are poor children, especially poor children of color in inner city neighborhoods, getting sick with asthma and dying from it more often than other children? Lack of preventive care, Kozol (1996) suggests:

When you ride on the Number 6 train from East 59th Street to the racial cutoff point at 96th, you pass beneath an area in which 2,400 private doctors, most of them highly qualified, have their offices and in which the ratio of doctors to residents is approximately 60 to 1,000. When you leave the subway at Brook Avenue, you are in a neighborhood in which the ratio is two per 1,000 (172-173).

In line with these numbers, the *Los Angeles Times* reported that at Kennedy Elementary School in East Los Angeles, the school nurse discovered none of the school's 30 asthmatic students was receiving preventive medication from a doctor (Cone 1996, A29). Also, poor families often cannot afford inhalers, which "cost between \$15 and \$40 each and often last only two weeks" (Kozol 1996, 171). "[P]eople in dilapidated homes frequently have intermittent heat and use gas ovens to warm their homes. At the same time, these homes are often poorly ventilated, allowing pollutants from stove exhaust to build up, bringing indoor air pollution to unhealthy levels and making asthma attacks more likely," said Dr. Payton Eggleston (1995), director of asthma programs at Johns Hopkins Hospital.

A recent national study found that living in a roach-infested home heightens a child's chances of suffering from asthma. A five-year study conducted in seven major cities concluded that children are at high risk of asthma if they are both allergic to cockroaches and, obviously, living around them. David Rosenstreich, the main author of the study, attributes about 25% of all asthma in inner cities to roaches (Leary 1997, A18).

Residents of neighborhood in the South Bronx have challenged the study. "The roaches have been here for millions of years. But people didn't start dying of asthma until the city turned this area into a toxic dumping ground," said Yolanda Garcia, head

of a tenant organization (quoted in Calderone et al., 1998, 35). At the heart of the Bronx asthma belt is Hunts Point – “home to the nation’s largest food distribution center, more than 20 waste transfer stations, dozens of manufacturing firms, salvage yards and auto-repair shops” as well as a medical waste incinerator that reportedly has racked up more than 500 pollution violations (35). Thirty percent of the students at P.S. 48 in Hunts Point have asthma. “Every year, my students get sicker and sicker,” said the principal (35).

Finally, a health care provider in the South Bronx offers this explanation of the high rates of pediatric asthma he sees: “Some of it is environmental – housing infestation, pesticides, no heat in an apartment. But a great deal is emotional as well. Fear of violence can be a strong constrictive force.” He predicts: “If you moved these families into a nice suburb, nine tenths of this feeling of constriction, I’m convinced, would be relieved” (Gilberto, quoted in Kozol 1996, 173-174).

RESPONSES: SCHOOLS AND SOCIETY

The numbers I have cited reflect immense suffering. Children literally are gasping for their lives, suffering irrevocable damage to their brains and nervous systems, dying painfully and young from the ravages of tuberculosis. Sadly, it is the same old story: Poor children of color, already suffering disproportionately in so many other ways, also are bearing the brunt of environmentally induced damage. “It is a hard truth that those with the highest risk of exposure also tend to be the most disadvantaged members of society with the fewest options for removing themselves from the risk” (Lively 1994, p. 331).

As several of the people I have quoted note, the problem is not lack of knowledge. As a society we know how to control asthma, how to eradicate lead poisoning, and how to prevent tuberculosis. We are also well aware of the existence of environmental racism.

[R]acial demographics have proved to be a critical determinant of environmental quality.... Private and governmental research has identified significant disparities in the placement of waste sites, enforcement of environmental laws, remedial action, location of clean-up efforts, and the quality of clean-up strategies (Lively 1994, p. 311).

The problem also, arguably, is not lack of money. By traditional measures, the economy is doing very well (Francis 1996, p. 1). Although the child poverty rate has

increased by a third since 1969, the gross national product doubled in these years (Children's Defense Fund 1997, 17).

According to the American Lung Association (1996), "critical gaps and barriers [remain] between patients and appropriate resources" (4). A recent review showed fewer than a third of the states have an initiative targeting asthma in their state health plans, and even fewer have actually implemented a program. Furthermore, "Virtually no state health departments have staff designated to develop, advocate and coordinate asthma programs" (4). The CDC's Strategic Plan for the Elimination of Childhood Lead Poisoning (1991), which represents a shift in strategy from "finding cases and then treating them" to "finding the toxicant in the environment, removing it, and breaking the exposure link," (Needleman & Jackson 1992, 678) six years later has not yet been fully implemented (CDC, pers. com. 1997).

It would be inaccurate to suggest that the society has turned its back completely on children suffering the effects of environmentally induced damage. Not surprisingly, the growing "asthma market" has unleashed a competitive race for new treatments (Begley 1997, p. 63; Gellene 1996, D1, D5). Also not surprisingly, the broader society has looked to its schools for at least a token response, and the schools are responding in characteristic ways – namely, by helping individuals learn to cope better. *The New York Times* reports:

To help children and parents learn how to function better with asthma, schools have begun to hold special asthma classes for children, organizing after-school asthma meetings, scheduling weekend asthma fairs and staging ceremonies starring famous asthmatics, like Jacki Joyner-Kersey, the Olympic track star. Some are giving out picture books and coloring books like "The Asthma Adventure" and "Asthma Explorers Official Asthmatic Trigger Book" (Belluck 1996, A39, A41).

Although clearly valuable, such coping-oriented responses do not address the fundamental problem, which is, it seems to me, that children living in unsanitary, polluted, hyper-stressful environments cannot "choose" to simply move

The insight expressed in an editorial about lead poisoning in the journal *Pediatrics* is worth quoting at length:

We will not end this man-made epidemic until we understand the reasons for its curious persistence in the face of considerable data about what lead does, and what is needed to rid ourselves of it. Among the reasons for desultory

attention to this epidemic is the stubborn belief that this is an affliction of only poor minority children. Related is the tendency on the part of some to blame the mother's rearing style for the elevated blood lead. Many people believe that with the passage of the Lead Paint Poisoning Prevention Acts, and the removal of lead from gasoline, the problem somehow disappeared. Academic pediatrics, with some exceptions, has not found this commonplace low technology malady as fascinating as molecular disorders.... Private pediatric practitioners generally believe that this is not a problem for their patients. The lead industry since at least as early as 1939 has worked to obscure the effects of lead on human health; this practice continues today. Finally, the size of the problem and the amount of dollars and effort involved result in a reflex wave of pessimism. Self-styled realists, when confronted with a 10-billion-dollar estimate to delead and improve the 2 million dangerous houses in which children live and the paint is peeling, shrug and turn away (Needleman & Jackson 1992, 679-680).

In other words, apathy, denial, and self-interest are contributing to the mounting damage from lead poisoning -- not "lack of knowledge about the toxic effects of lead, for these have been known for years, not ... a failure of legislative resolve, for lead-based gasoline additives have been eliminated, not ... a lack of industrial alternatives, for lead-free paints are widely used" (King 1993, 160).

Since the CDC lowered the acceptable blood-lead level from 25 micrograms to 10 micrograms per deciliter, the federal government has required all states to screen young children covered under Medicaid for lead poisoning. However, the best test costs significantly more than its less sensitive alternative. Consequently, most states are using the latter and "many cases of dangerous blood-lead levels ... go undetected" (Stevens 1995, 89). Also, some clinicians hesitate to screen children for lead essentially for fear of what they will find. Needleman and Jackson (1992) explain: "Clinicians are reluctant to screen because, at levels of lead less than 25 [micrograms per deciliter], no pharmacologic treatment is currently available" (679). However, "When no children are screened, no cases are found, and the myth that there is no lead problem becomes fixed." In fact, "when screening is put in place, community lead problems have been identified consistently" (679).

Importantly, the CDC's strategic plan has been stalled *not* because the cost of preventing lead poisoning cannot be rationalized. On the contrary,

The Plan estimates the costs for deleading homes and the benefits that accrue from reduced need for medical care, for special education and the increase in wages that goes with having a higher IQ.... The conclusion of the analysis, described as conservative by Centers for Disease Control, is that the net return to our society for deleading the housing stock in the United States would be \$28 billion more than the costs of the abatement.... The numbers are clear; it makes unequivocal fiscal sense to make this investment in human capital (Needleman & Jackson 1992, 680).

Clearly, more is involved here than straightforward cost-benefit analysis. Reluctance to respond directly and decisively to the problem of lead poisoning, and more generally to environmentally induced damage and disease, reflects judgments of worth (whose health is worth protecting?) bound up in the social values and political struggles of our time. From this perspective, Nancy Fraser's (1989) discussion of the political character of "needs talk" provides a useful lens through which to view environmentally induced damage to children, so I turn next to some of her ideas.

ISSUES OF FRAMING AND INTERPRETATION

"Talk about people's needs," Fraser (1989) argues, "is an important species of political discourse" (161). What will count as a matter of legitimate political concern is an open question, subject to struggle and contestation; needs previously regarded as private matters sometimes become politicized and vice versa.² Also open are the questions of how such needs will be interpreted and how people regarded as having these needs will be construed – as individual cases or members of groups, victims or advocates? When matters previously regarded as outside the social realm "break out of zones of discursive privacy" to become the focus of public contestation, "previously taken-for-granted interpretations of these matters are called into question" (167-168). When this happens, newly politicized needs may be reprivatized or translated into claims for governmental response. However, successfully politicized needs still are subject to contestation over how they will be interpreted.

And so it is with respect to environmentally induced damage and disease. The public discourse on lead poisoning, asthma, and tuberculosis reflects, in part, a struggle over issues of interpretation. Doctors and other medical people dominate this discourse; reporters ask them questions and quote them, as I have. However, within this "expert" realm are those who argue that environmentally induced damage ought to be seen in broad social and environmental terms rather than narrow "medical" ones

(e.g., Werner 1993). Similarly, within the educational realm, Kozol, along with a few others (e.g., Wilson 1996), insists that lead-induced brain damage, for example, ought to be seen as an educational as well as an environmental issue.

However, as the editorial writers quoted earlier suggest with respect to lead poisoning, environmentally induced damage generally is construed not as a socially constructed problem with environmental roots, but rather as an affliction of "other people's children" (Delpit 1995) and, furthermore, as something for which these children's parents largely are to blame. Consider, for example, the assumptions implicit in these comments: "These kids wind up, more often than not, managing their own asthma, because the parents aren't around or the parents have asthma that they themselves don't know how to manage," said a public health administrator for a school health program in East Harlem, quoted in *The New York Times* (Belluck 1996, A41). "I'm very suspicious of where [children poisoned by lead] are getting the lead from. I've even thought that some parents might be feeding it to them just like there were parents who were throwing their kids out of the window so they could sue for kids falling out of the window," said a landlord in the Bronx, also quoted in *The New York Times* (Purdy 1994, B3).

Meanwhile, schools and public agencies are offering educational programs and making efforts to increase access to treatment. As valuable as such management efforts are, they nevertheless are aligned with a particular interpretation of environmentally induced disease -- namely, that this is a private matter for afflicted individuals and their families to cope with on their own through treatment and education, and not fundamentally a social issue with a social etiology requiring a social response. Continuing along this interpretative path almost certainly will lead to more lessons in how to cope, but not necessarily to public outrage or to a broad social commitment to providing all children with what they need to be healthy, grow, and learn.

If educators and educational scholars are to play a significant role in shaping "needs talk" around environmentally induced damage, we will need to challenge not only how this phenomenon is framed in the public discourse, but also ideas about what counts as "educational." This essentially is Kozol's challenge: to rethink what needs are educational -- the need to be tested fairly? to compete in unrigged competitions? to be protected from toxins and other socially constructed and environmentally induced hazards? -- and to align reform agendas and scholarship accordingly.

It is important to recognize that public health issues, including environmentally induced damage, have not always been construed as a private responsibility to be coped with, individually, as best one can. The framing of public health issues as problems to be managed primarily through treatment or education of the afflicted has not always been the norm. During the early 1900s, child health was widely regarded as a social problem with a social etiology and as a matter of public responsibility, and not primarily as an issue of personal misfortune or parental irresponsibility. "It was recognized that disease was a 'removable evil' and that the elimination of social problems, like crowded housing, poor nutrition, and limited sanitation, could improve children's health" (King 1993, 121). This recognition led to a

moral campaign against the problems that faced American children....

Physicians, social workers, psychologist, child advocates, and mothers worked side by side in local and national organizations ... to further the health of American children.... Mothers and physicians alike were concerned with the care of individual children, but increasingly they addressed the social and political problems that confronted families and professionals across the nation (121-122).

Not surprisingly, "Many problems were solved, and fewer children died of preventable diseases and injuries" during this time (142). Such a perspective on environmentally induced damage and child health in general seemingly could be revived.

It is also important to recognize, however, that these are very different times. Self-righteous victim-blaming and simplistic parent (usually mother) bashing stand in for serious social analysis, and a dangerous antipathy lurks just below the surface of much of our public talk. "[W]e so desperately distrust and dislike lower-class adults that we are willing to let their children suffer as well," speculate Grubb and Lazerson (1982, 207; quoted in Polakow 1993, 146). "I feel embarrassed by it all; ashamed," confesses a Catholic priest in Brooklyn's Southside neighborhood. "The politicians have decided to treat the poor people like cockroaches, as things to be squashed" (Karvelis; quoted in Sexton 1997, A27).

Identifiable groups of children have already been damaged in wildly disproportionate numbers, and are continuing to be irrevocably, in many cases. This, at least, is the conclusion I have reached on the basis of the numbers I have cited. It is a conclusion, however, that can be bent to horrible political ends.³ To speak of damage to children in a society such as ours that lacks any "public love" for them (Grubb &

Lazerson 1982, 44) is both necessary and in some ways risky. The public discourse on poverty, across most of the political spectrum, already construes the poor as figuratively diseased (Polakow 1993, 43). That this appears to be literally true to an unconscionable degree invites at least two very different responses: (1) to recognize the social etiology of environmental damage and to respond accordingly – by demanding, collectively, that the fundamental causes (unsanitary living conditions, dangerous and dilapidated housing, toxic pollution, unrelenting stress, and so on) be removed and the damage thereby prevented; but (2) to resolve to keep one's own distance, if at all possible. I can imagine many people thinking: "Environmentally induced damage and disease don't affect my child. Why should I worry about this? If *they* don't want to clean up their homes or take their asthmatic children to the doctor, what can I do about it? And if *their* lead-poisoned children can't learn or won't behave, why should my children suffer alongside them in the classroom!"

Many children are trapped in environments that are making them sick, damaging them permanently, or even killing them, unnecessarily in the sense that the society lacks neither the knowledge nor the money to prevent the damage. This reality needs to be fully acknowledged and taken up as a social *and educational* issue. Attention, however, is not enough. Without insight into the moral horror of inaction, which the framing of the problem as individual cases of bad luck invites, and without the ability to arouse public outrage, the facts and figures of damage can be used to rationalize more disregard and unconcern, not less.

I thank Jeffrey Kane and Paul Morgan for helpful comments on earlier versions of this article.

NOTES

1. Dr. Robert Massad, a family-practice specialist at Montefiore Medical Center in the Bronx, provided Kozol (1996) with these numbers (171). Other studies have shown similar variations – e.g., see the reference to a 1992 study in Belluck (1996, A41).
2. Fraser (1989) uses the example of wife battering – a phrase that did not exist until about 25 years ago. Rather, "When spoken of publicly at all, this phenomenon was called 'wife beating' and was often treated comically, as in 'Have you stopped beating your wife?' Linguistically, it was classed with the disciplining of children

- and servants as a 'domestic' – as opposed to a 'political' matter" (175). Feminists then changed the language and altered the perceptions of the practice by arguing "that battery was not a personal, domestic problems but a systemic, political one; its etiology was not to be traced to individual women's or men's emotional problems but, rather, to the ways these problems refracted pervasive social relations of male dominance and female subordination" (175).
3. Consider, for example, Herrnstein and Murray's frightening argument for what they construe as a sort of "humane social segregation" of the allegedly genetically inferior. See *The Bell Curve* (New York: Free Press, 1994).

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